

## ABSTRACT

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A zero-footprint remotely hosted phone application development environment is described. The environment allows a developer to use a standard computer without any specialized software (in some embodiments all that is necessary is a web browser and network access) together with a telephone to develop sophisticated phone applications that use speech recognition and/or touch tone inputs to perform tasks, access web-based information, and/or perform commercial transactions. For example, in preparation for a sales pitch for selling hosting services, a non-programmer can develop a short application appropriate to the target customer. After the pitch, access to the demonstration could be given to the target customer to allow them to more fully develop the application. When the target customer is satisfied with the application, they can have their application live for their actual (as opposed to test users) at a suitable phone number simply by having the hosting provider configure the appropriate access. Once the source code of phone application is identified to the development environment, the developer can use a telephone to immediately call the application on the hosted development environment. Some embodiments support concurrent call flow tracking that allows a developer to observe, using a web browser, the execution of her/his application. A variety of reusable libraries are provided to enable the developer to leverage well-developed libraries for common playback, input, and computational tasks. This focuses the development on application specific logic. Embodiments of the invention simplify the process of defining speech recognition grammars within their applications. Embodiments of the invention support rapid application deployment from the development environment to hosted application deployment to the intended audience.